

Date: Wed, 10 Nov 93 04:30:35 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V93 #99
To: Ham-Homebrew

Ham-Homebrew Digest Wed, 10 Nov 93 Volume 93 : Issue 99

Today's Topics:

Ferrite Transformers (3 msgs)
Phase-lock to WWV ?

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 9 Nov 93 16:35:26 GMT
From: ogicse!uwm.edu!linac!att!cbnews!gwk@network.ucsd.edu
Subject: Ferrite Transformers
To: ham-homebrew@ucsd.edu

Date: 10 Nov 93 01:01:59 GMT
From: ogicse!uwm.edu!math.ohio-state.edu!sdd.hp.com!col.hp.com!fc.hp.com!
perry@network.ucsd.edu
Subject: Ferrite Transformers
To: ham-homebrew@ucsd.edu

Galen Watts (galen@picea.CFNR.ColoState.EDU) wrote:

: The ferrites I've been able to get out of switching supplies didn't work
: too well at RF (I was on 6m, they may be OK at MF or HF). They were
: very lossy.

Switcher ferrite is optimized for use around 100 KHz for well, switching power supplies. I would expect them to be quite lossy at 50 MHz. I'm playing with designing my own switcher and intend to stay near DC.

: I, too, have ferrite shards in the corners of the shack. Wear goggles!

Safety glasses are always a good idea for homebrewers.

Perry

Date: 9 Nov 93 00:29:30 GMT
From: sdd.hp.com!col.hp.com!fc.hp.com!perry@hplabs.hp.com
Subject: Ferrite Transformers
To: ham-homebrew@ucsd.edu

It seems we've figured out how to rewind a conventional transformer. Has anyone else tried prying apart one of those ferrite transformers found in switching power supplies? Seems they are one amorphous mass of ferrite, copper, transformer tape, and varnish. Ferrite is an especially brittle substance.

I've tried pulling a few apart and have little ferrite shards all over the shack.

Perry Scott
AA0ET

Date: 10 Nov 93 04:02:33 GMT
From: noc.near.net!news.delphi.com!usenet@uunet.uu.net
Subject: Phase-lock to WWV ?
To: ham-homebrew@ucsd.edu

I've got a better idea, if you have access to a satellite dish...find a color TV whose circuitry is such that you can measure its color oscillator frequency without too much trouble. Hook this up to the satellite receiver and tune in NBC (Satcom F1R channel 8) or one of the ABC channels on Telstar 302 (they're encrypted, but still have valid sync). These networks (as well as CBS) use atomic standards to drive their master sync generators -- NBC is actually using a cesium standard, I think CBS and ABC use rubidium -- so that their multiple studio sites can be kept in sync without too much tweaking. With this hookup in place set your counter to read 3.5795454... MHz (the 54s go on infinitely).

Interestingly enough, since WWV's master clock site in Boulder doesn't have a clear line of sight to the transmitters in Fort Collins, they have an arrangement with one of the Denver TV stations; they microwave a clock signal over to that station (I've forgotten which one) and have gear there to phase-lock the color subcarrier to it. At the WWV Fort Collins site they then take the signal off air and phase-lock all their frequency standards to the burst; audio gets there over a leased phone line from Boulder.

End of Ham-Homebrew Digest V93 #99

